ABSTRACT

A drying shrinkage-reducing agent which comprises a polymer containing as an essential component at least one structural unit (I) represented by the following formula (1):

[Chemical 1]

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$$R^{1} R^{2}$$
| |
- (C-C) - (1)
| |
 $R^{3} COOR^{4}$

wherein R^1 , R^2 , and R^3 independently stand for a hydrogen atom, a methyl group, or a $-(CH_2)_pCOOX$ group, wherein X stands for a hydrogen atom, a monovalent metal, a divalent metal, an ammonium group, an organic amine group, or a hydrocarbon group, and p is an integer of 0 - 2; and R^4 stands for a hydrocarbon group of 4 - 30 carbon atoms,

and exhibiting surface tension in the range of 25 - 50 mN/m in a solution containing 0.2 mass% of the polymer in a cement supernatant is provided. The drying shrinkage-reducing agent manifests no dispersibility in an amount capable of attaining necessary drying shrinking-reducing properties and, when used in combination with a dispersing agent, acquires ability to adjust the dispersibility and the drying shrinkage-reducing properties fit for the purpose.